CHANGING WHAT'S POSSIBLE

THE ADVANCED RESEARCH PROJECTS AGENCY-ENERGY
OVERVIEW

ABOUT ARPA-E

The Advanced Research Projects Agency-Energy (ARPA-E) provides R&D funding for transformational ideas to create America's future energy technologies. ARPA-E focuses exclusively on early-stage technologies that could fundamentally change the way Americans get, use, and store energy.

ARPA-E funds innovative ideas from academia, private industry, national laboratories, start-up companies, and small businesses—providing project teams with an average award of $2-3 million over several years. Every project team receives hands-on guidance to meet ambitious technical milestones that push the boundaries of energy innovation. ARPA-E's unique Technology-to-Market program also empowers project teams with business insight and strategies to accelerate their progression towards commercialization.

As of September 2022, ARPA-E has funded more than 1,415 energy technology projects across over 69 focused programs and open solicitations.

ARPA-E HISTORY

In 2005, leaders from both parties in Congress asked the National Academies of Sciences, Engineering, and Medicine to identify concrete steps that federal policymakers could take to bolster U.S. competitiveness in science and technology as a means to help the United States prosper and stay secure in the 21st century. The Academies recommended that Congress establish an Advanced Research Projects Agency within the U.S. Department of Energy (DOE).

In 2007, Congress passed, and President George W. Bush signed into law, the America COMPETES Act, establishing ARPA-E. In 2009, Congress appropriated the new agency's first $400 million in funding.

ARPA-E is modeled after the successful Defense Advanced Research Projects Agency (DARPA) in the Department of Defense (DOD), the agency credited with such innovations as GPS, the stealth fighter, and computer networking.

"Pound for pound, dollar for dollar, it's hard to find a more effective thing government has done than ARPA-E."

-FedEX founder, chairman, president and CEO Fred Smith

ARPA-E'S UNIQUE PROCESS

ARPA-E actively manages its projects, positioning them so partners are likely to commit to the next stage of development once ARPA-E's funding period is over. ARPA-E advances its early-stage technologies toward the market with results-oriented handoff strategies:

- **New company formation**, which takes place when ARPA-E project teams at labs or universities "spin out" their work, can facilitate and expedite the commercialization process for technologies.
- **Patents and publications** generated by ARPA-E project teams help advance scientific understanding and technology innovation.
- **Follow-on investment** from private investors during or after an ARPA-E award can provide project teams with the strategic funding needed to advance their technologies.
- **Strategic partnerships** with private companies that can license, acquire, and buy technologies help project teams progress along a clear path to market after their time with ARPA-E.
- **Public funding** from other government agencies, including the DOD and other DOE agencies, can advance projects after ARPA-E's initial funding.

As of September 2022, 200 ARPA-E projects have attracted more than $11 billion in private-sector follow-on funding. This does not include the $21.8 billion in exit valuations from 26 mergers, acquisitions, and IPOS. In addition, 131 ARPA-E project teams have formed new companies to advance their technologies, 289 licenses have been issued for ARPA-E tech, and 281 ARPA-E projects have partnered with other government agencies for further development. Moreover, ARPA-E projects have generated 6,257 peer-reviewed journal articles and 934 patents issued by the U.S. Patent and Trademark Office.

CONTACT US

Members of the public, including news media, may contact ARPA-E by reaching out to:

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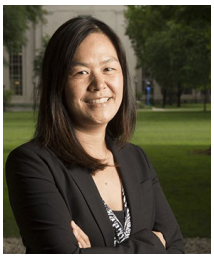
ARPA-E LEADERSHIP



Dr. Evelyn N. Wang currently serves as the Director at the Advanced Research Projects Agency-Energy (ARPA-E), where she leads the Agency's development, launch, and execution of high-risk, high-reward energy research and development programs. Prior to ARPA-E, Dr. Wang served as the Ford Professor of Engineering and Head of the Department of Mechanical Engineering at Massachusetts Institute of Technology (MIT). While at MIT, she focused on thermal management, thermal energy conversion and storage, and water harvesting and purification. Dr. Wang was previously the Associate Director of the MIT Solid-State Solar-Thermal Energy Conversion Center, a DOE Energy Frontiers Research Center.

Dr. David Tew currently serves as the Acting Deputy Director for Technology at the Advanced Research Projects Agency – Energy (ARPA-E). His focus at ARPA-E includes combined heat and power systems, industrial processes, and transportation energy efficiency. Prior, Tew spent 19 years working for United Technologies Corporation (UTC)—in roles at the Research Center, Pratt and Whitney, and UTC Power. He led a combustor technology group and portfolio at Pratt and Whitney and helped manage a microturbine-based combined heat and power product line at UTC Power. Tew also served as an Adjunct Professor of Mechanical Engineering at Rensselaer Polytechnic Institute's Hartford campus for over ten years.

Shane Kosinski serves as the Deputy Director for Operations. He is responsible for oversight and operations of all ARPA-E programs. Kosinski served as the acting deputy director for ARPA-E and led the effort to stand up the ARPA-E Program Office and develop the means to efficiently and effectively obligate ARPA-E's Recovery Act funding. Kosinski previously worked in DOE's Office of the Chief Financial Officer, where he led several agency-wide efforts for the 2009 Presidential Transition and the American Recovery and Reinvestment Act.

Dr. Daniel Cunningham serves as the Acting Associate Director for Technology-to-Market, where he helps prepare innovative energy technologies for transition from the lab to the market. Cunningham most recently worked at BP Group Technology in the Chief Scientist's Office evaluating emerging energy technologies such as energy storage and alternative fuels pathways and assessing their impact on future business. Prior to this role, Cunningham served in multiple capacities at BP Solar Inc., including Director of Product Development leading a multidisciplinary team to develop new technologies for BP Solar's product line, as well as Director of Technology.

2023 ARPA-E ENERGY INNOVATION SUMMIT

On March 22-24, 2023, ARPA-E will host the 13th ARPA-E Energy Innovation Summit at the Gaylord National in National Harbor, MD. This unique event assembles the nation's top energy innovators, investors, and entrepreneurs to discuss challenges and opportunities in the energy space and move technologies toward commercialization.

The Technology Showcase is a fan favorite aspect of the Summit. This year's Showcase will feature more than 300 exhibitors displaying the nation's most innovative, next-generation energy technologies. Summit attendees have the opportunity to check out potentially groundbreaking technologies and speak with the ARPA-E awardees, vetted technology companies, and government agencies developing them.